

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:	:	Confirmation No.:
Fred R. Kramer	:	1896
	:	
Application No.: 10/791,502	:	Group Art Unit:
	:	1637
Filed: March 2, 2004	:	
	:	Examiner:
For: OPTICALLY DECODABLE	:	Suchira Pande
MICROCARRIERS, ARRAYS AND	:	
METHODS	:	
_____	:	X

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VYACHESLAV VASILYEV, REG. NO. 58,154

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Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO INTERVIEW SUMMARY REPORT**

Sir:

In response to the Interview Summary Report of April 7, 2009 ("Interview Summary"),  
Applicants request consideration in view of the following remarks.

**REMARKS**

Applicants thank the Examiner and her supervisor for the kindly granted telephonic interview with Applicants' representatives. While Applicants believe that in substance the Examiner's Interview Summary is correct, Applicants wish to clarify two points.

First, the Examiner stated that the prior art did not teach coding beads with molecular beacons. The term "molecular beacons," coined by Applicants, is used by them, both generally and in the instant application, to mean hybridization probes having a fluorophore and a quencher. Their first publication of such probes in *Nature Biotechnology* in 1996, for example, was titled "Molecular Beacons: Probes that Fluoresce upon Hybridization." The pending claims recite that the fluorophore/quencher-labeled coding hairpins "are not hybridization probes for said multiplicity of sequences."

Rather than describing these hairpins as "molecular beacons" that are not probes, Applicants respectfully suggest that for clarity they be referred to as they are in the claims, that is, as signaling hairpins that are not probes for the possible targets.

The other point of clarification concerns the Examiner's statement that a new search will be performed to look for art suggesting a coding scheme based of FRET. Applicants point out that the instant application teaches that quenchers of signaling hairpins may quench by FRET or by physical interaction. See, published application US 2004/0248163 A1 at page 2, left column, paragraph [0008]. The search should include coding that utilizes contact quenching by a quencher as well as FRET quenching by a quencher.

**CONCLUSION**

Applicants respectfully maintain their argument presented in the latest response to the Office Action that the prior art of record does not disclose or suggest the use of such signaling hairpins. Favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, Applicants request a personal meeting with the Examiner. The USPTO is authorized to charge Deposit Account No. 50-1943 for any charges in connection with this matter.

Date: May 1, 2009

Respectfully submitted,

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